Good Display Specifications

Type:	Standard
Model No.	GD070AUL
Description:	● 7.0”, 480 x234dots, TFT LCD module. ● With white LED backlight ● VIDEO input.

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Good Display

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Catalogue

Version

Date	Version	Content
2007-3-24	VER:1.00	The First Version
2008-2-19	VER:1.01	The Second Version

1. Profile：

GD70AUL Ver:1.01 TFT LCD module is composed of JD70AUL driver board and 7" TFT display GTI070TN07. It provides users with video signal input and automatic identifying and converting of NTSC/PAL systems, built-in OSD(on-screen display) function, and the OSD menu offers adjustment of brightness, contrast and color. The power control IC is designed for better reliability.

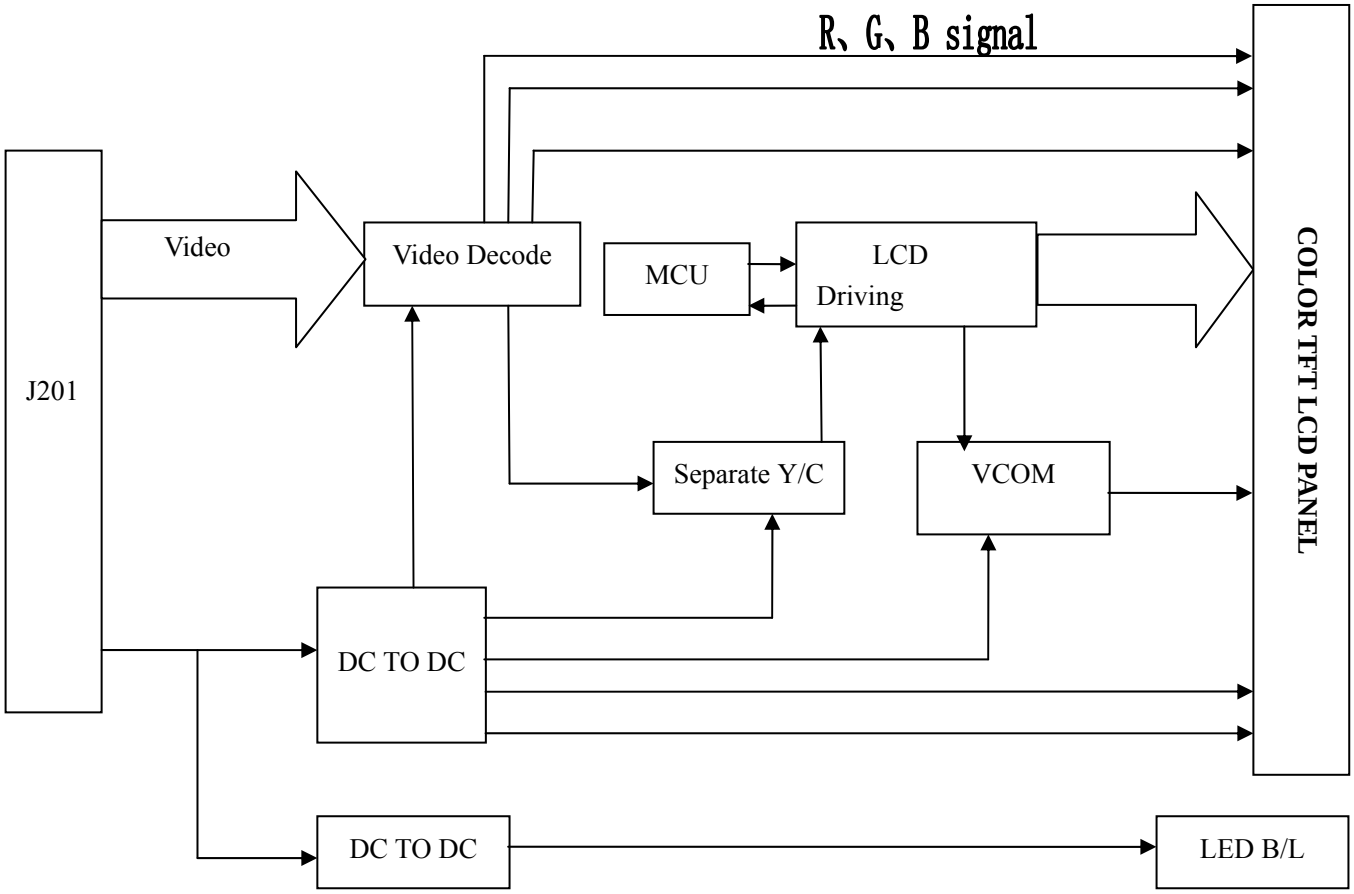
2. Application：

- Office electronic equipment
- Apparatus & measurement appliance
- Machinery
- Audiovisual （Display for car、Portable DVD、Long-distance terminal、LCD TV）
- Home appliance （Video door phone、Video telephone）

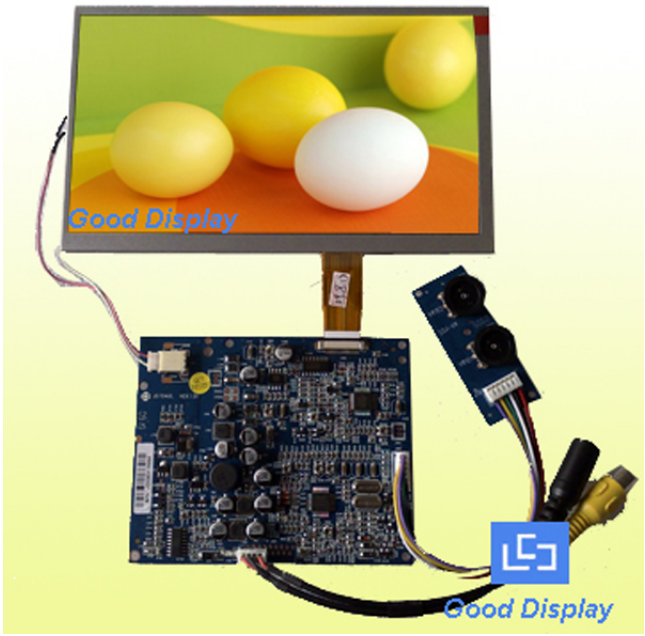
3.Main Parameter：

- Product Name：7.0" TFT LCD Module
- Product Model：GD70AUL
- TFT display：7.0" TFT display: GTI070TN07
- Back light：LED
- Resolution：480×3(RGB)×234
- Viewing angle:（U/D/L/R）：（40/60/60/60）
- Brightness：>200 cd/m^2
- System：PAL/NTSC(Automatic switch)
- Signal input：Video
- Voltage input：DC 12V±25% (12V 280mA±30mA)
- Active Area (mm)：154.08（W）× 86.58（H）
- Outside dimension of display (mm)：164.9（W）×100（H）×5.7（D）
- Structural dimension of PCB (mm)：102.3(W)×82.4（H）× 8.15（D）
- Operation temperature：-20~+60℃
- Relative humidity：5~95% RH
- Storage humidity：-30℃~+70 ℃

4. Block diagram:

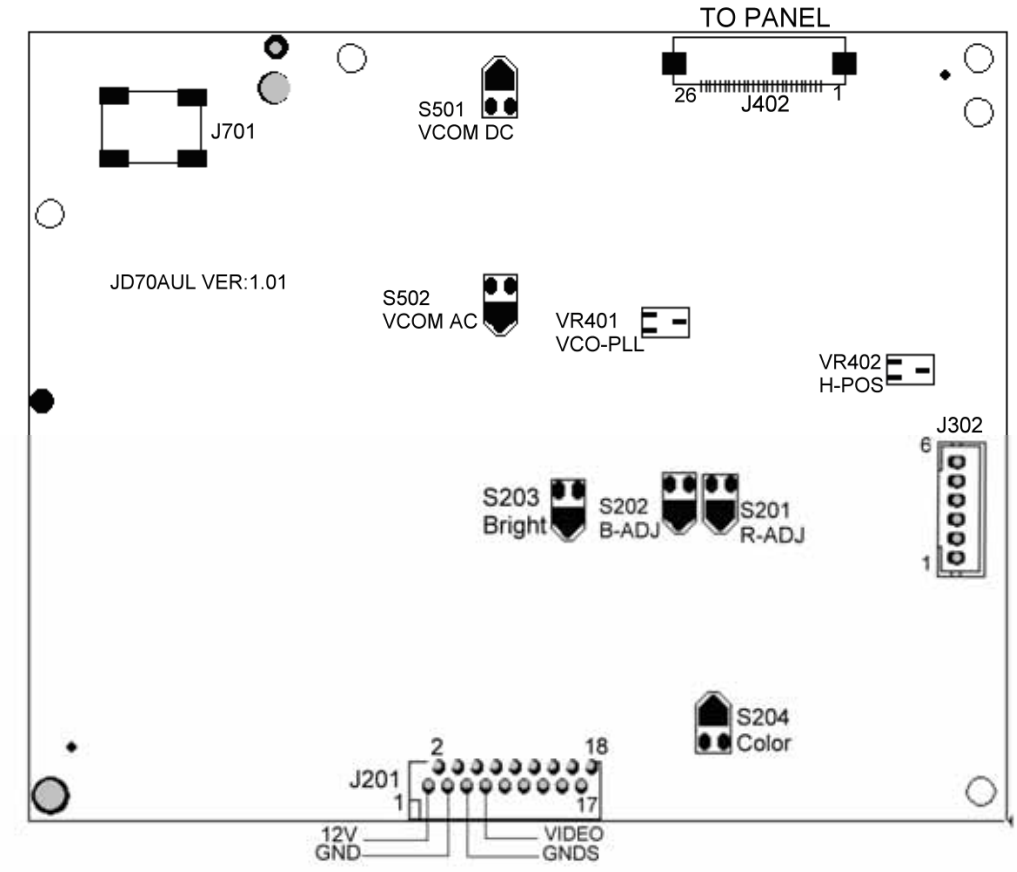


GD70AUL TFT LCD Module's Picture：



5. Wiring Diagram：

JD70AUL Wiring Diagram:



6. Connector definition for driver board：

6.1 J302 Connector Definition ：

Pin No.	Symbol	I/O	Description	Remark
1	COL-	I	Color reduce	
2	COL	I	Color	R:1
3	COL+	I	Color plus	
4	BRI-	I	Brightness reduce	
5	BRI	I	Brightness	R:2
6	BRI+	I	Brightness plus	

[Note1] It’s thick when the voltage is high,and thin when the voltage is low.
[Note2] It’s light when the voltage is high,and dark when the voltage is low.

6.2 J201 Connector Definition：

No.	Symbol	I/O	J201Pin description	Remark
1,2	+Vin	I	+12v power input	
3,4	GND	-	Power ground	
5	GNDS	-	Video signal ground	
6	CONT	I	Contrast adjust	
7	VIDEO	I	Composite videosignal input	
8	BRI	I	Brightness adjust	
9	COL	I	Color adjust	
10	L/R	I	left/right inverse control	
11	TINT	I	Tint control	
12	-HSY	O	Horizontal Sync Signal output	
13	-VSY	O	Vertical Sync Signal output	
14	Rin	I	Red Video Signal Input	
15	Gin	I	Green Video Signal Input	
16	Bin	I	Blue Video Signal Inpu	
17/18	16：9/4：3		16：9/4：3 switch	

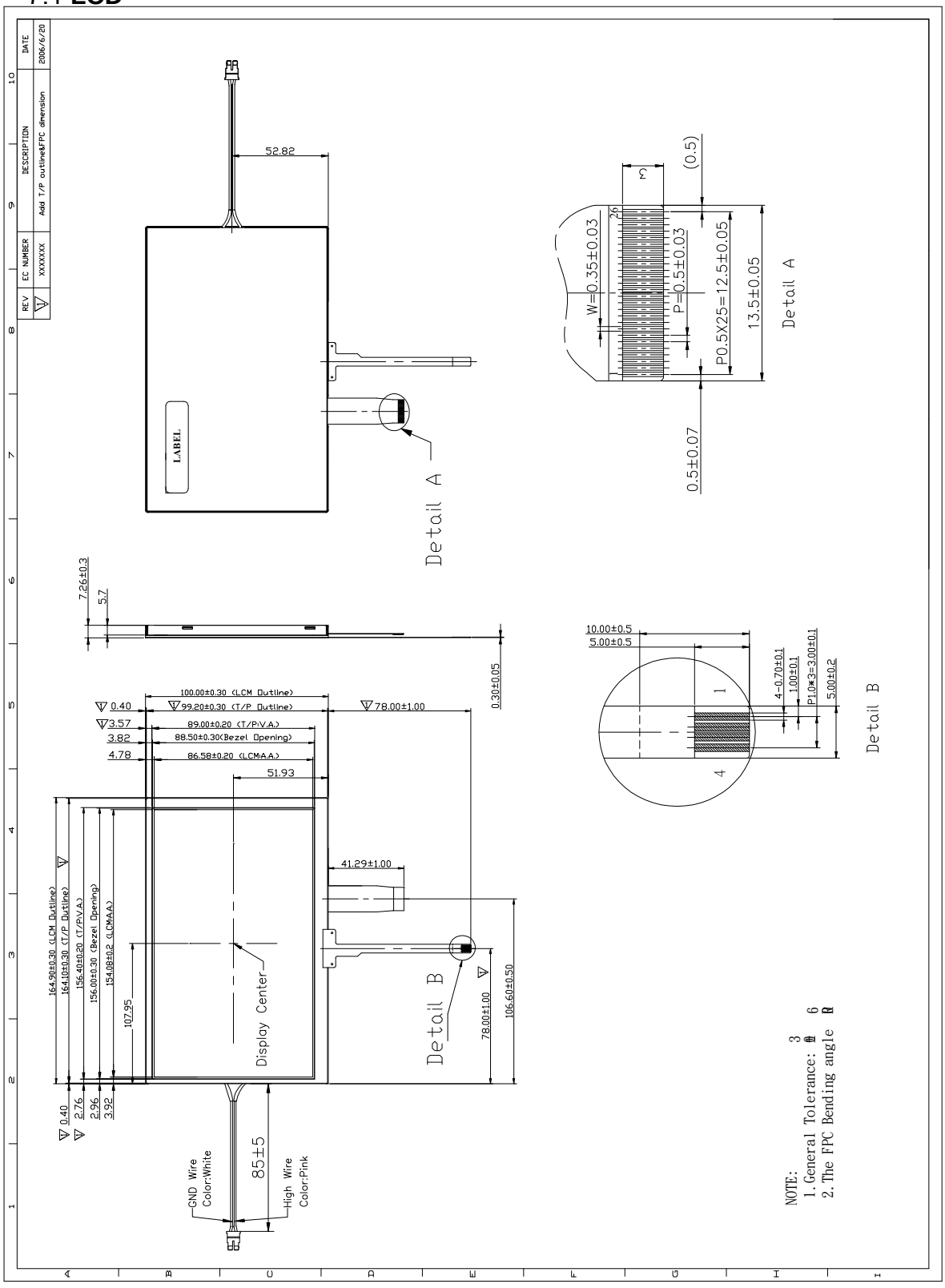
Remark: Commonly,use for 4pin,it is pin1,pin3,pin5,pin7.

6.4 CN6 Connector Definition:

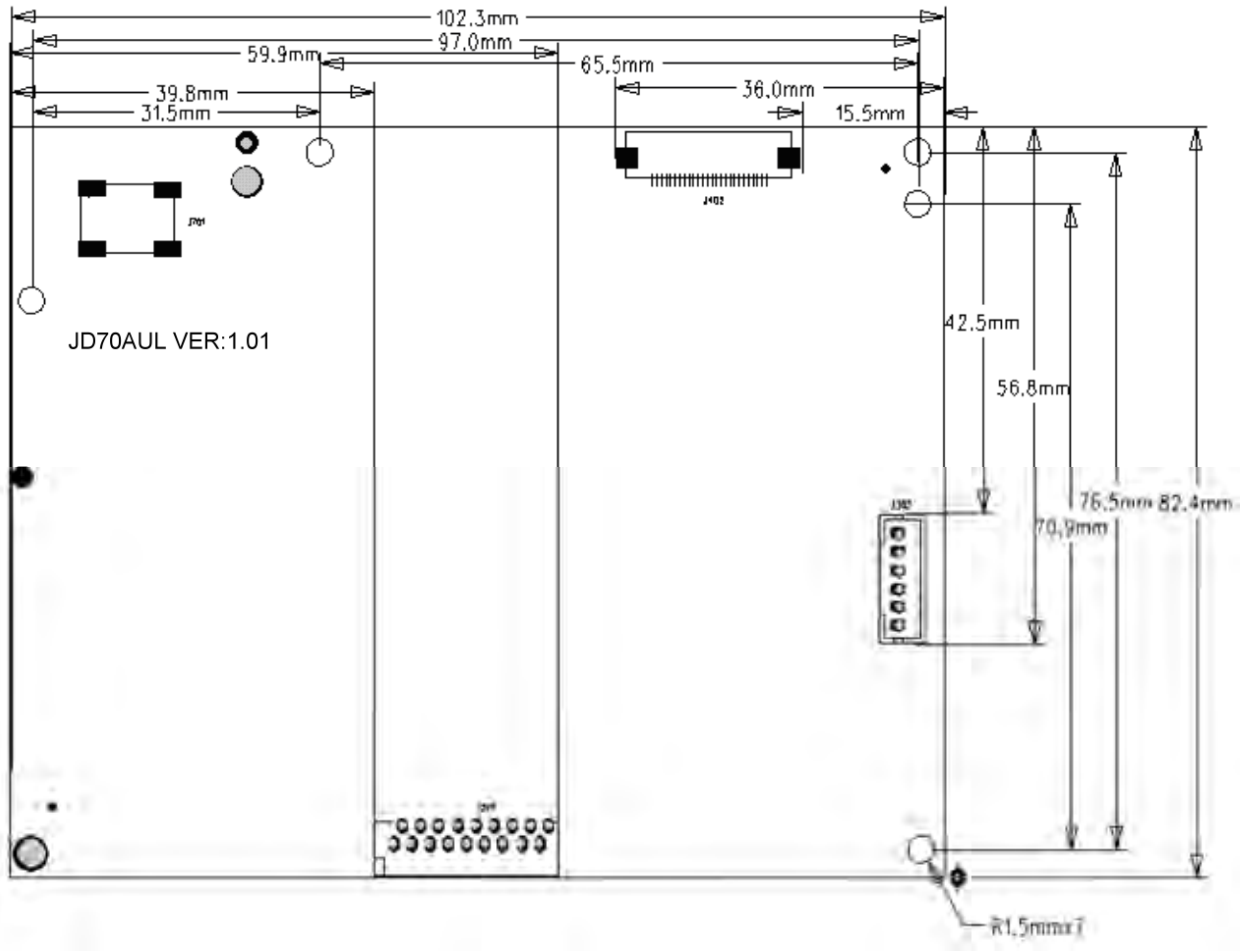
NO	Symbol	I/O	Description	Remark
1	GND	P	Ground	
2	VCC	P	Supply voltage for scan driver	
3	VGL	P	Negative power for scan driver	
4	VGH	P	Positive power for scan driver	
5	STVD	I/O	Vertical start pulse down side	Note 1
6	STVU	I/O	Vertical start pulse up side	Note 1
7	CKV	I	Shift clock input	
8	U/D	I	UP/DOWN scan control input	Note 1
9	OEV	I	Output enable control for scan	

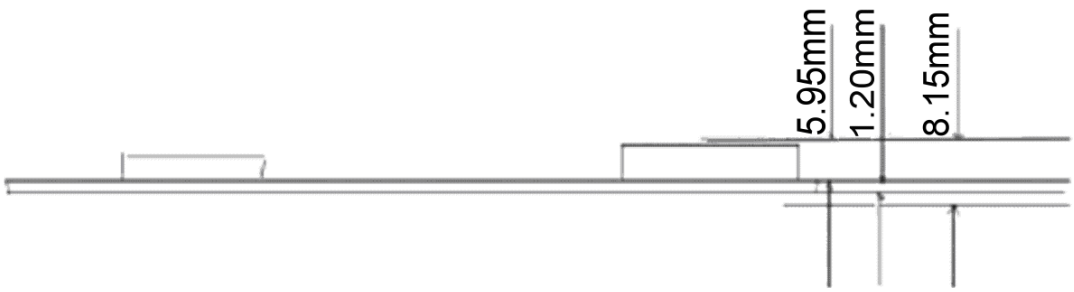
7. Structure Diagram：

7.1 LCD



7.2 PCB:


102.3mm
97.0mm
59.9mm
65.5mm
39.8mm
31.5mm
36.0mm
15.5mm
JD70AUL VER:1.01
42.5mm
56.8mm
76.5mm
82.4mm
70.9mm
R1.5mmx7


5.95mm
1.20mm
8.15mm

8. 7.0" TFT- LCD PANEL Inspection Standard:

Aim：Establishing the standard of PANLE for inspecting material & progress and for clients' inspection.

Scope：Apply to 7.0″ TFT LCD

Content：

8.1. Inspection standard and method：

8.1.1. The method and determinant of inspecting the nick of panel of LCD：

8.1.1.1. Inspect vertically (or at 45 ° angle from left/right)under the light tube (the power is 20 W) in the distance of 30cm to the panel. If there is no nick , it is "OK". Otherwise "NG".

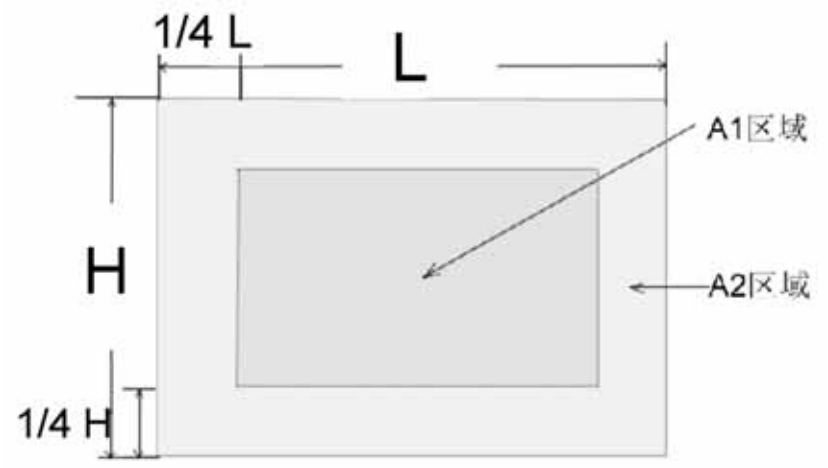
8.1.2. The method and determinative for black & white & color spots for the Panel of LCD：

8.1.2.1. Inspection methods

8.1.2.1.1. Black spots：under status of denote light，set the MASK of black spot inspection near the black spot then compare the big and small by eyes.

8.1.2.1.2. White & Color spots: under status of denote light, set the Mask of black spot inspection on the white spot(or color spot) then inspect them by eyes if it can hide.

8. 1. 2. 2. Division of LCD Panel



Remark：A1：The center of the available area for the picture

A2：The edge of the available area for the picture（around the central area）

8.1.3. Determinant Choice

Spot Diameter（mm）		Allowed Area	
		A1	A2
Black Spot	d≤0.15	Irrespective	Irrespective
	0.15<d≤0.3	4	4
	0.3<d≤0.5	2	3
	0.5<d<0.8	0	2
White or color spot	d≤0.15	Irrespective	Irrespective
	0.15<d≤0.3	3	3
	0.3<d≤0.5	1	2
	0.5<d<0.8	0	1

Remark: 1. Size: Average Diameter=（Max. Diameter + Min. Diameter）/2

2. Using information above as a standard in order to judge while the spot are dense.

3. Black & White spot：To judge the obvious spots through the change of voltage by comparison。

4. Total quantity of Black & white & color spot: A1+A2 ≤ 4。

9. Packing

TBD

10. Attention:

1. The voltage of supply power don't exceed maxmium limit.
2. The connector can’t connect board in reverse, or the board will be burnt and the products can't funtion well.
3. Please don’t touch it in order to keep your skin non-burn when you electrify the board(there is high voltage on the board).
4. 7.0” TFT LCD Panel is a electronic product, so you need to take anti-static measure when you operate it.
5. 7.0” TFT-LCD Panel is a glasswork, place carefully ,broken for fear.
6. The connection is “FPC”, which connect 7.0” TFT-LCD panel with PCB, Please operate it carefully in order to keep it well.
7. Don't touch the pin of "variable resistor" when you adjust "VR".